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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,204	Applicant(s) JANSSEN, CRAIG N.	
	Examiner Freda A. Nelson	Art Unit 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 5, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment received on October 22, 2007 is acknowledged and entered.

Claims 1, 11, 15, 22, and 24 have been amended. No claims have been added. Claims 1-32 are currently pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 5, 2007 has been entered.

Response to Amendment and Arguments

Applicant's arguments filed October 22, 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., generating a schedule of the construction projects (for facilities within the complex) using a determined revenue, costs of the stadium, and a constraint) are not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument that no art of record teaches or suggests this limitation, no combination of the references can teach or suggest the limitation, the Examiner respectfully disagrees. Gordon discloses the system 10 also includes one or more application modules 20 for performing various functions, applications and/or operations and one such application has capabilities for providing immediate cost estimates once selection is made and dimensions are either input or obtained from the existing file; and a further application includes scheduling estimates for the project and in the event of a construction design change once work has commenced (paragraph [0024]); and the system 10 may further include at least one interactive module 22 that allows the master customer to fill out a profile, on-line, regarding demographic information, financial constraints, and other personnel preferences, such as overall style preference, color preference and others. Based on the input information, the interactive module provides a list of suitable choices, selections or suggestions. The interactive module 22 may also include scheduling information regarding each of the contractors, such as access to the contractors' individual calendars.

Claim Rejections - 35 USC § 112

Claims 1, 15, 22, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 11, 15, 22, and 24, the claim language "allowing a user to place a constraint" does not positively recite that a user places a constraint.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 5, 13-15, 20-22, 24, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (US 6,154,730) in view of Gordon (US PG Pub. 2002/0099725), still in further view of Hertzelszabadi (US PG Pub. 2003/0233267), still in further view of Christianitytoday.com.

As per claims 1, 13-15, 20-21, and 30-32, Adams et al. disclose a method, comprising:

identifying a plurality of facilities in a complex, each facility associated with a construction project (col. 1, lines 41-44; col. 3, lines 38-57); and

determining a potential revenue associated with at least one of the facilities; and

determining a cost associated with at least one of the facilities (col. 1, lines 46-51).

Adams et al. does not expressly disclose allowing a user to place a constraint generating a schedule of the construction projects using the identified potential revenue and the identified cost; and generating a schedule of the construction projects using the identified potential revenue and the identified cost.

However, Gordon discloses the system 10 also includes one or more application modules 20 for performing various functions, applications and/or operations and one such application has capabilities for providing immediate cost estimates once selection is made and dimensions are either input or obtained from the existing file; and a further application includes scheduling estimates for the project and in the event of a construction design change once work has commenced (paragraph [0024]); and the system 10 may further include at least one interactive module 22 that allows the master customer to fill out a profile, on-line, regarding demographic information, financial constraints, and other personnel preferences, such as overall style preference, color preference and others. Based on the input information, the interactive module provides a list of suitable choices, selections or suggestions. The interactive module 22 may also include scheduling information regarding each of the contractors, such as access to the contractors' individual calendars.

Hertzel-Szabadi discloses that the project structure with phases (work breakdown structure elements) and the necessary activities (tasks) have to be defined and costs and potential revenues have to be calculated, timelines to be scheduled and probably personnel and other resources soft-booked, in order to be able to do reasonable and reliable quotations that can be fulfilled in case they are accepted by the customer (paragraph [0003]); and the planning of structures, costs, revenues, resources, timeliness etc. can and will normally be refined and detailed during the life cycle of the project 105 (paragraph [0028]).

Christianitytoday.com discloses a formula used to compute the size of a church complex; and spreading the calculations throughout the sanctuary, meeting rooms, nurseries, and educational space of your church complex (page 2); and form a committee to decide how much money can be raised for the building project (page 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adams et al. to include the features of Gordon, Hertzel-Szabadi, and Christianitytoday.com in order to give reasonable and reliable quotations (see Hertzel-Szabadi paragraphs [0003],[0017],[0028]).

As per claim 2, Adams et al. disclose the method of claim 1, further comprising: predicting a number of people who will use at least one of the facilities (abstract; col. 51-56); and wherein determining the potential revenue

associated with at least one of the facilities comprises determining the potential revenue associated with at least one of the facilities using the predicted number of people (abstract; col. 4, 51-56).

As per claim 5, Adams et al. disclose the method of claim 1, wherein identifying the plurality of facilities comprises receiving an identification the facilities from a user (abstract).

As per claim 22 and 24, Adams et al. disclose a system, comprising:
memory operable to store information identifying a plurality of facilities in a complex, each facility associated with a construction project (col. 1, lines 41-44; col. 3, lines 38-57); and an analysis module operable to:

determining a potential revenue associated with at least one of the facilities;
determining a cost associated with at least one of the facilities (col. 3, lines 2-19).

Adams et al. is silent about a computer program embodied on a computer readable medium, however, this feature is deemed to be inherent in the Adams et al. invention in order to run the STAFI system.

Adams et al. do not further disclose generating a schedule of the construction projects using the identified potential revenue and the identified cost.

However, Hertz-Szabadi discloses that the project structure with phases (work breakdown structure elements) and the necessary activities (tasks) have to be defined and costs and potential revenues have to be calculated, timelines to be scheduled and probably personnel and other resources soft-booked, in order to be able to do reasonable and reliable quotations that can be fulfilled in case they are accepted by the customer (paragraph [0003]); and that the planning of structures, costs, revenues, resources, timeliness etc. can and will normally be refined and detailed during the life cycle of the project 105 (paragraph [0028]).

Christianitytoday.com discloses a formula used to compute the size of a church complex; and spreading the calculations throughout the sanctuary, meeting rooms, nurseries, and educational space of your church complex (page 2); and form a committee to decide how much money can be raised for the building project (page 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adams et al. to include the feature of Hertz-Szabadi and Christianitytoday.com in order to give reasonable and reliable quotations (see Hertz-Szabadi paragraphs [0003],[0017],[0028]).

2. Claims 6-7, 10, 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (US 6,154,730) in view of Gordon (US PG Pub.

2002/0099725), still in further view of Hertz-Szabadi (US PG Pub.

2003/0233267), still in further view of Christianitytoday.com, still in further view of Elliot (US 6,446,053).

As per claims 6-7 and 17, Adams et al. do not disclose the method of claim 1, wherein generating the schedule comprises, for each construction project, receiving from a user an identification of one of a plurality of phases during which the construction project would occur.

However, Elliot discloses that the user computer organizes these time estimates according to the proper order in a construction project, for example, framing (Phase 5) must be completed before other phases can commence, however, some of the following phases can commence simultaneously, such as plumbing and framing (col. 10, lines 34-39; TABLE 1); and after Phase 1 is complete, the application guides the user through the next phase, Phase 2: Begin Site Work in 120 and 122 and in Step 1: Excavation, the application retrieves the square footage of the lot from memory, accesses the regional database, determines average labor rate for excavation subcontractors in that region, determines equipment costs for excavation in that region, and then calculates an estimate for the excavation step, wherein the equipment costs may include rental, fuel, and insurance costs (col. 8, lines 32-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adams et al. to include the feature of Elliot in order to provide the user with a cost associated with a phase of the construction.

As per claims 10 and 23, Adams et al. do not disclose allowing a user to alter data used to generate the schedule; and showing the user real time how the changes in the altered data affect the schedule.

However, Elliot discloses that if the user is not satisfied with the cost of the installation, the user can undo the operation and simulate another installation; and if the user is satisfied with the installation, the user computer moves on to the next step, updating and storing the revised graphical model and cost estimate model (col. 6, lines 38-48); and if any feature of the proposal is unsatisfactory, the user can revise the proposal at 126, wherein the user selects the phases and steps he wishes to edit at 128 and edits the proposal at those points (col. 10, lines 40-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adams et al. to include the features of Gordon, Hertz-Szabadi, Christianitytoday.com, and Elliot in order to provide the user with the ability to make changes to the construction plans.

3. Claims 11, 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (US 6,154,730) in view of Gordon (US PG Pub. 2002/0099725), still in further view of Hertz-Szabadi (US PG Pub. 2003/0233267), still in further view of Christianitytoday.com, still in further view of Elliot (US 6,446,053), still in further view of Wakelam (US 6,859,768).

As per claims 11, 19, and 29, Adams et al. do not disclose allowing a user to place a constraint on data used to generate the schedule; and showing the user in real time how at least one change in the altered data and constraint affects the schedule.

However, Wakelam et al. disclose that the Interview massing element 201 gathers some basic information regarding the project and allows the user to change some high-level parameters of the building design and then controls the assembly hierarchy to produce a full-scale, three-dimensional model of the building, complete with drawings, specifications cost estimation, and schedule (col. 13, lines 34-50; FIG. 1-1a).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adams et al. to include the features of Wakelam et al., Gordon, Hertz-Szabadi, Christianitytoday.com, and Elliot in order to provide the user to use what-if scenarios to get a variety of estimates.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Elazouni (US PG Pub. 2003/0233303), which discloses a method and apparatus for finance-based scheduling of construction projects.

2) Kazaz et al., "Project Scheduling with Discounted Cash Flows and Progress Payments", 1996, Journal of the operational research Society, pgs 1262-1272.

3) Smith-Daniels et al., "Maximizing the net present value of a project to materials and capital constraints", October 1987, (2 page abstract).

4) Easa, Said M., "Resource Leveling in Construction by Optimization", June 1989, Journal of Construction Engineering and Management, Vol. 115, No. 2. pgs 302-315.

5) Russell, Robert A., "A Comparison of Heuristics for Scheduling Projects with Cash Flows and Resource Restrictions, October 10, 1986, Management Science, Vol. 32, No. 10, pgs 1291-1300.

6) Padman et al., "Heuristics Scheduling of resource-Constrained Projects with Cash Flows and Resource", Heinz School of Public Policy and Management, Carnegie Mellon University, pgs 365-381.

Examiner's Note:

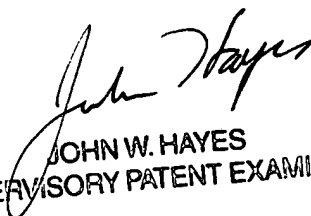
Examiner has cited particular pages, columns, paragraphs and/or line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FAN 12/27/2007



JOHN W. HAYES
SUPERVISORY PATENT EXAMINER